

circuit, under time control, as a function of the rpm at the time when the error occurred, particularly by the application of a voltage indicator via the PWM,

and, in case the detection means detects an error and no motor rpm is detectable at the time when the error occurred, the electromotor is braked, by producing, at least temporarily in at least one motor phase, a short circuit, under time control, as a function of the maximum rpm of the direct current motor.

9. Electrical drive according to one of Claims 5-8,

characterized in that, in addition, an electronic control and regulation auxiliary unit is provided, which presents braking or stopping auxiliary means, for braking the electromotor if the detection means detected an error in the electronic control and regulation unit and which prevents a reliable control of the power electronics by the stopping and control means.

10. Computer program,

characterized in that it presents program steps for carrying out the method according to one of Claims 1-4.

Abstract

Method for Error Detection for Electromotors

In a method for braking or stopping an electromotor which can be operated with direct current, particularly a brushless direct current motor, if there is an error in the electromotor or in the electronic or mechanical units connected to the latter, the presence of definite error states is verified, and the electromotor is braked, by carrying out, taking into consideration a maximum

loading capacity of an electronic control unit which is connected to the electromotor, at least temporarily, a control of the electromotor which is adapted to the detected, definite error state.